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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,578	10/13/2004	Ljubomir Misev	CO/2-22659/A/PCT	4524
324	7590	08/04/2010	EXAMINER	
BASF Corporation Patent Department 500 White Plains Road P.O. Box 2005 Tarrytown, NY 10591			DAHIMENE, MAHMOUD	
			ART UNIT	PAPER NUMBER
			1713	
			NOTIFICATION DATE	DELIVERY MODE
			08/04/2010	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

andrea.dececchis@basf.com  
deborah.pinori@basf.com  
sonny.nkansa@basf.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/511,578	<b>Applicant(s)</b> MISEV ET AL.	
	<b>Examiner</b> MAHMOUD DAHIMENE	<b>Art Unit</b> 1713	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 45-67 is/are pending in the application.
- 4a) Of the above claim(s) 47, 58 and 60-67 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 45, 46, 48-57 and 59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Finality of the previous rejection of 3/17/2010 is withdrawn***

***In response to applicant's arguments***

Applicant's argument stating that "non-English document cannot be relied on beyond the English abstract itself" is persuasive, therefore the finality of the office action of 3/17/10 is withdrawn. The instant final office action is issued to remedy such a deficiency. A copy of the translation of the reference of Epailard is attached.

***Election/Restrictions***

Applicant's election of the species of photolent compound (A) described by applicant's formula (I) , filed on 11/20/2009, is acknowledged.

Claim 47 and all dependent claims 61-67, 58 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Claim 47 requires the photolent compound to be selected from the group consisting of formula V, VI, VII, VIIa, which are not elected species.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claim 45-46, 49-50, 52-57, 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Epailard et al. (Makromolekulare Chemie, 189(5) (1988), pp. 1035-1042).

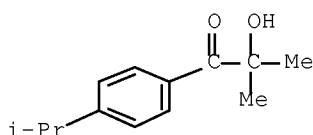
Epailard discloses "the reactive species (radicals, ions, etc.) or the UV-visible radiation emitted by the excited species initiate the cold plasma-induced polymerization of a monomer in the liquid or solid state. The residual C:C double bond concentration of an acrylic monomer depends on the plasma characteristics (gas nature, pressure, discharge power, etc.), and also on the polymerization conditions. The UV-visible radiation emitted in a cold plasma has more influence on the thickness of the film than

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the reactive species bombardment" (abstract). Epailard uses a initiator for plasma polymerization darocur 1116 (D1116) (page 5 of the English translation of the Epailard publication) described, in the chemical abstract, as

69673-85-4 HCAPLUS

CN 1-Propanone, 2-hydroxy-2-methyl-1-[4-(1-methylethyl)phenyl]- (CA  
INDEX NAME)



Which reads on applicant's formula (I).

It is noted that Epailard does not expressly disclose the polymerisable compound is a free radical it would have been obvious to one of ordinary skill in the art at the time the invention was made to understand that free radicals play an important role in polymerization, and thus, expect the monomers of Epailard to be free radical polymerizable.

It is also noted that Epailard is silent about a plasma discharge chamber, however, Epailard discloses a helium plasma at 0.56 Torr of pressure. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to understand that sub-atmospheric plasmas are created in confined chambers in order to reach sub-atmospheric pressures through vacuum pumping.

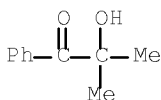
***Claim Rejections - 35 USC § 103***

4. Claims 48, 51, 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Epailard et al. (Makromolekulare Chemie, 189(5) (1988), pp. 1035-1042) as applied to claim 45 above in view of Kunz et al. (US 2003/0129322).

It is noted that Epailard is silent about ink, sensitizer compound or pigments in the composition.

Kunz teaches the same kinds of compounds (according the chemical abstract)

RN 7473-98-5 HCAPLUS  
CN 1-Propanone, 2-hydroxy-2-methyl-1-phenyl- (CA INDEX NAME)



as the ones used by Epailard's compounds are used in inks comprising sensitizers (paragraph 0124) and pigments (paragraph 0137).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the process of Epailard to include sensitizer compound or pigments in the composition when the coating needs to a color or shade because Kunz teaches the same kinds of compounds are conventionally used for curable ink.

One of ordinary skill in the art would have been motivated to add sensitizers and pigments when the coating of Epailard needs to have a specific color or shade.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MAHMOUD DAHIMENE whose telephone number is (571)272-2410. The examiner can normally be reached on week days from 8:00 AM. to 5:00 PM..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. D./  
Examiner, Art Unit 1713

/Shamim Ahmed/  
Primary Examiner, Art Unit 1713